

EPA DETAILED COMMENTS

ALTERNATIVES

Appendix C-2, C-3, Threshold Determination: The draft PEIS states that the weight threshold for a mass animal health emergency is 50 tons. It is unclear how APHIS arrived at this number.

RECOMMENDATION: EPA recommends that APHIS clarify the following regarding the 50 ton threshold.

- The derivation of the 50 ton threshold;

Pg. 24, Cattle Disposal: The draft PEIS is also unclear whether APHIS considers both milk cows and beef cattle in the analysis¹.

RECOMMENDATION: EPA recommends that APHIS clarify in Section A “U.S. Livestock Production and Inventories” (*Affected Environment, Pg. 24*) whether milk cows are included in the analysis.

Executive Summary, Pg. vi, Disposal Options: The draft PEIS states: “Unlined burial and open-air burning of carcasses during a mass animal health emergency are expected to have the greatest impacts to the environment, particularly when carcasses are contaminated with biological, chemical, and/or radiological agents not naturally found in animal carcasses.” It is unclear why the unlined burial and open-air burning of carcasses would remain as options in all three alternatives, including the no action alternative, if they pose the greatest potential environmental impacts.

RECOMMENDATION: EPA recommends that APHIS clarify why unlined burial and open burning are still considered in all alternatives and remain part of the preferred alternative, when these methods are considered the most impactful to human health and the environment.

Pg. 14, Burial Option: The draft PEIS states that the unlined burial option is considered for inclusion in all three alternatives, including the preferred alternative: unlined burial involves the excavation of a pit, placement of carcasses in the pit, and backfilling with the excavated material. It is unclear when an unlined burial option would be the best option for disposal. Further, it is unclear why the pit needs to remain unlined, when use of a landfill-grade liner would largely reduce risk of groundwater contamination, as described in the compost option².

¹The introduction for Section A (*U.S. Livestock Production and Inventory*) mentions cattle and calves and subsection 1 (*Cattle*) states that cattle will be the focus of *this section* (emphasis added). However, milk cow data is provided in this section.

² *Compost piles are sometimes placed directly on the bare ground; however, a barrier may also be placed between the ground and the piles to help contain leachate. Impermeable barriers can be made of polyvinyl chloride (PVC),*

RECOMMENDATION: EPA recommends that APHIS include the following information regarding unlined burial pits as a method of disposal in the final PEIS:

- Under what circumstances would the option for unlined burial pit be employed as it poses higher human health and environmental risks than other options.
- Whether burial pits can be lined with a landfill-grade liner to prevent potential environmental contamination.

CLIMATE CHANGE and GREENHOUSE GASES

Pg. 125: EPA notes the thorough discussion on climate change, starting on page 125. As recommended by the Draft CEQ Guidance on Climate Change, this section includes discussions on (1) how climate change impacts carcass management and (2) how impacts from various carcass management alternatives impact climate change. We commend APHIS for analyzing climate change impacts both to and from each of the alternatives.

Climate change impacts to carcass management include changes in temperature and rainfall (impacting feed and water availability, changing conditions for pathogens or vectors, such as mosquitos, and causing distress to livestock); these impacts from climate change are more gradual in nature. We commend APHIS for providing a detailed look at gradual impacts from climate change to carcass management although we recommend that the analysis also look at impacts as a result of extreme weather events such as storms, floods, and droughts that are likely to increase in frequency and intensity as a result of climate change.

RECOMMENDATION: EPA recommends that APHIS expand the climate change analysis to include increased frequency and intensity of weather events. EPA is particularly interested in seeing how extreme weather events might contribute to mass animal health emergencies and impact implementation of mass animal health emergency protocols.

WASTE MANAGEMENT

The draft PEIS includes several mentions of personal protective equipment (PPE) used during handling and disposal of carcasses during mass animal health emergencies. PPE is critical for keeping workers and handlers of carcasses safe during a mass animal health emergency. EPA notes that proper decontamination and disposal protocols of PPE are not detailed in the draft PEIS and the link to APHIS's standard operating procedures (SOP) for PPE³ is inaccessible as

plastic, concrete, or asphalt. A layer of biodegradable carbon sources (e.g., straw, sawdust, corn stalks, and yard waste) may also be placed beneath carcasses to act as a sorbent and biofilter layer used to capture and assist in degrading pollutants). (Page 45)

³ <http://inside.aphis.usda.gov/vs/em/fadprep.shtml>

provided.

RECOMMENDATION: Provide a working link to the SOP for the PPE. In the event that SOPs do not address proper disposal, EPA recommends that APHIS include more detail on how PPE will be handled and disposed of during a mass animal health emergency.

Pg. 54: The draft PEIS mentions consideration of the carcass management protocols in local emergency planning). It is unclear if other related local or regional plans also incorporate the carcass management plan. EPA is interested in debris management plans for natural disasters, particularly in rural areas, which have larger agricultural sectors.

RECOMMENDATION: EPA recommends that APHIS clarify how local or regional debris management plans, particularly for areas with larger agricultural sectors, would integrate the carcass management protocols.

Pgs. 106, 109: The draft PEIS includes some information (such as costs for transportation and handling) for disposal at an off-site facility, such as a landfill or fixed-facility incinerator). It is unclear whether livestock managers or other decision makers would have the ability to identify facilities that can and are willing to take carcasses before a mass animal health emergency occurs in order to prevent complications during the emergency event.

RECOMMENDATION: EPA recommends that the final PEIS clarify whether livestock managers are able to identify off-site facilities (such as landfills and fixed-facility incinerators) that are capable and willing to take carcasses *before* a mass animal health emergency occurs, reducing complications during an emergency.

ENVIRONMENTAL JUSTICE

Section 2. Executive Orders 12898 and 13045 (pp. 98, 99)

During a mass animal health emergency, the PEIS recognizes the need to identify surrounding “low-income or minority communities for reasonably foreseeable impacts, conduct “appropriate outreach” and incorporate “appropriate mitigations” if necessary.

RECOMMENDATION: EPA recommends that APHIS provide more detail on how that identification would be made, what type of outreach could occur, and what mitigation options could be put in place.
